IN THE CLAIMS:

1. (Currently Amended) A method for configuring a peripheral bus, the method comprising:

querying ~~a~~ the peripheral bus, said querying including reading each possible address on the peripheral bus;

determining the presence of a peripheral device at an address on the peripheral bus;

reading configuration information from the peripheral device, wherein the ~~peripheral~~ configuration information includes device identification information, wherein said reading is performed over a serial side bus, wherein the serial side bus is coupled to the host controller and the peripheral device; and

configuring the bus, said configuring including programming the peripheral device to use one or more timeslots[[.]];

wherein said querying, said determining, said reading, and said configuring are performed by a host controller coupled to the peripheral bus.

2. (Cancelled).

3. (Original) The method as recited in claim 1, wherein the peripheral bus is a serial bus.

4. (Original) The method as recited in claim 1, wherein the configuration information further includes one or more of the following:

quantity of timeslots needed by the peripheral device;

position of timeslots needed by the peripheral device;

data width of the peripheral device;

supported peripheral modes;

amount of buffer memory available in the peripheral device;

data format required by the peripheral device;
amount of I/O space required on higher layer system buses; and
clocking information.

5. (Original) The method as recited in claim 4, wherein the clocking information includes a determination of whether a peripheral device clock is a master clock or a slave clock.

6. (Original) The method as recited in claim 4, wherein the configuration information is passed from the peripheral device to the host controller by a single serial read.

7. (Original) The method as recited in claim 4 further comprising the host controller reading device identification information from the peripheral device, and obtaining additional configuration information from a lookup table.

8. (Cancelled).

9. (Original) The method as recited in claim 1 further comprising storing the configuration information from the peripheral device in a serial erasable programmable read-only memory (EPROM).

10. (Cancelled).

11. (Original) The method as recited in claim 1, wherein the device identification information includes vendor identification and function of the peripheral device.

12. (Original) The method as recited in claim 1, wherein the peripheral device is plug and play compatible.

13. (Original) The method as recited in claim 1 further comprising performing said querying, said determining, said reading, and said configuring for one or more additional peripheral devices coupled to the peripheral bus.

14. (Currently Amended) A computer system comprising:

a host controller;

a peripheral device coupled to the host controller by a peripheral bus;

wherein the host controller is configured to:

query a peripheral bus, wherein querying includes reading each possible address on the peripheral bus;

determine the presence of the peripheral device at an address on the peripheral bus;

read configuration information from the peripheral device, wherein the configuration information includes device identification information, wherein configuration information is read by the host controller over a serial side bus, wherein the serial side bus is coupled to the host controller and the peripheral device;

configure the bus, wherein configuring the bus includes programming the peripheral device to use one or more timeslots.

15. (Original) The computer system as recited in claim 14, wherein the peripheral bus is a serial bus.

16. (Original) The computer system as recited in claim 14, wherein the configuration information further includes one or more of the following:

quantity of timeslots needed by the peripheral device;

position of timeslots needed by the peripheral device;

data width of the peripheral device;

supported peripheral modes;

amount of buffer memory available in the peripheral device;

data format required by the peripheral device;

amount of I/O space required on higher layer system buses; and
clocking information.

17. (Original) The computer system as recited in claim 16, wherein the clocking information includes a determination of whether a peripheral device clock is a master clock or a slave clock.

18. (Original) The computer system as recited in claim 16, wherein the configuration information is passed from the peripheral device to the host controller by a single serial read.

19. (Original) The computer system as recited in claim 16, wherein the host controller is configured to read device identification information from the peripheral device, and obtain additional configuration information from a lookup table.

20. (Cancelled).

21. (Original) The computer system as recited in claim 14 further comprising a serial erasable programmable read only memory (EPROM) configured to store the configuration information from the peripheral device.

22. (Cancelled).

23. (Original) The computer system as recited in claim 14, wherein the device identification information includes vendor identification and function of the peripheral device.

24. Cancelled.

25. (Currently Amended) The computer system as recited in claim 14, wherein the host controller is further configured to query the peripheral bus for additional

peripheral devices, and upon detection of an ~~addition~~ additional peripheral device, to read configuration information from the additional peripheral device, and reconfigure the bus, wherein reconfiguring the bus includes programming the additional peripheral device to use one or more timeslots.

26. (New) The method as recited in claim 8, wherein the serial side bus is separate from the peripheral bus.

27. (New) The computer system as recited in claim 20, wherein the serial side bus is separate from the peripheral bus.